DOCUMENT RESUME

ED 324 955 FL 018 938

AUTHOR Willig, Ann C.; Swedo, Jana J.
TITLE Improving Teaching Strategies for Exceptional Hispanic Limited English Proficient Students: An Exploratory Study of Task Engagement and Teaching Strategies.
PUB DATE Apr 87
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 1987).
AVAILABLE FROM Ann C. Willig, Florida Atlantic University, Multifunctional Resource Center, College of Education, 500 NW 20 St. MT-17, Boca Raton, FL 33431.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Bilingual Education; *English (Second Language); Evaluation; *Hispanic Americans; Individualized Instruction; Instructional Effectiveness; *Learning Disabilities; *Limited English Speaking; Mild Mental Retardation; Spanish Speaking; *Special Education; Teacher Education; *Teaching Methods; Videotape Recordings

ABSTRACT

An exploratory and descriptive study of instruction for Hispanic Limited-English-Proficient (LEP) students is presented. The study was based on data collected during part of a 4-year project to develop teacher training modules for teachers of learning disabled and mildly mentally retarded Hispanic LEP children. As a result of the second year of the project, which involved classroom observation and videotaping of actual classes, a secondary study was developed to identify major types of instructional practices employed with LEP children in special education. The descriptive information contained in this report is anchored with data on task engagement in order to evaluate the effectiveness of various instructional techniques. Observations indicated that direct instruction enhanced task engagement, and that this relationship was mediated by the nature of instruction--the most engaging activities drew heavily upon the experience, language background, and interests of the students. It was also noted that instruction at high conceptual levels was possible when the native language is used. Finally, task engagement during seatwork was closely related to the ability of the teacher to provide guidance and individualized instruction. (JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED324955

IMPROVING TEACHING STRATEGIES FOR EXCEPTIONAL HISPANIC LIMITED ENGLISH PROFICIENT STUDENTS: AN EXPLORATORY STUDY OF TASK ENGAGEMENT AND TEACHING STRATEGIES

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

A. Willig

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Ann C. Willig

and

Jana J. Swedo

Paper presented at the annual meeting of the American Educational Research Association. April, 1987. Washington, DC.

Handicapped Minority Research Institute
on Language Proficiency
Department of Special Education
College of Education
The University of Texas at Austin

FL018938

The fact that disproportionate numbers of culturally and linguistically different (CLD) children are placed every year in special education programs under the labels of learning disabled (LD) or mildly mentally retarded (MR) compels investigation not only of the referral and assessment procedures that determine placement, but also of the nature of instruction that CLD children receive both in regular classrooms and in special education classrooms. Inappropriate instruction in the regular classroom could be the factor that precipitates special education placement and, once a child is placed in special education, the nature of the instruction received could either promote or impede success in the regular classroom. Although research on effective instruction for CLD children in the regular classroom setting is just beginning to appear in the literature, there has been almost no work to identify effective instructional practices for CLD children in special education.

The present paper is an exploratory study of instruction for Hispanic limited-English-proficient students in special education. It is based on a subset of data collected during the second year of a four-year, four-phase project to develop effective intervention strategies for serving Hispanic LEP children in programs for the learning disabled (LD) and mildly mentally retarded (MR). The ultimate goal of the four-year project is the development and validation of teacher training modules for serving exceptional Hispanic students.

The first year of the project was a preparatory year which included pilot classroom observations and interviews with monolingual English and bilingual (English/Spanish) special education teachers. A related study conducted as part of this phase of the project examined the specific goals and objectives most frequently delineated in the Individual Educational Programs of LEP students in special education. In the second year of the study, additional classroom observations were conducted and 60 hours of instruction in special education classrooms that served LEP children were videotaped. The goal of these observations was to identify the characteristics of promising instructional practices found in special education classrooms and to develop additional practices that could help to meet the needs of LEP children.

Year 3 will involve the actual development of teacher training modules for instructional practices to be used with LD and mild MR LEP students and year 4 will include formal validation of the teacher-training modules using quasi-experimental designs.

The present paper will describe a secondary study developed as a result of the classroom observations in year 2. The goal was to identify major types of instructional practices used with LEP children in special education and to evaluate the potential of these practices for enhancing achievement of this group of students. Since there is virtually no existing research base which describes teaching practices used for mildly handicapped LEP students, nor which even describes the basic characteristics of these students, the study is exploratory and primarily descriptive in nature. The data are based on classroom observations that were conducted with a deliberate attempt to

avoid premature focusing on any particular type of event and to capture a variety of classroom activities.

The descriptive information is anchored with data on task engagement in order to provide indications of the effectiveness of the instruction observed. The task engagement variable was used because of the heterogeneity of the student composition in special education classrooms and the lack of a homogeneous set of achievement measures with which to investigate the effectiveness of the observed instruction. Task engagement has been found consistently to correlate with achievement () and is considered to be a major mediating factor between teaching characteristics and achievement.

Method

Data source

Data for this study are based on videotapes of classroom instruction that were taped during year 2 of the four-year project. In order to examine instruction in classrooms that contained children at approximately the same grade levels, tapes from four classrooms were selected from the larger data base. These four special education classrooms served Hispanic LEP students in grades four to six who resided in the Southwest. Teachers nominated by district personnel agreed to participate in the study and a minimum of two consecutive full days of instruction were videotaped in each classroom. Additional taping was done in selected classrooms. No tapes made on the first day of taping were used in the study.

The four classrooms represent the two most common instructional arrangements for special education students -- partially self-contained classrooms and resource rooms. In the partially self-contained rooms, students spend most of the day and are responsible primarily to the special education teacher. When children attend the resource room, they are on leave from their regular classroom and attend for periods ranging from one to several hours per day or week, depending upon their individual needs. Most of the children in this study attended the resource room for several hours every day. The characteristics of the students and teachers in each of the classrooms observed are described in more detail below.

Classroom I. Classroom I is a partially self-contained room where students receive all of their instruction except for music and physical education. The five students who comprise the class are all Spanish-speaking LEP and have been placed in special education as LD with language disorders. Three of these students are fourth graders, one is a fifth grader, and one is in the sixth grade.

Both the teacher and the half-time aide in this room are native speakers of Spanish. Most of the instruction in the classroom is carried out in Spanish although English is used in small-group reading and math instruction for three of the more English-proficient students. ESL classes are taught within the same classroom by the special education teacher.

Classroom II. Classroom II is also a partially self-contained room

with many of the same characteristics as Classroom I. It is located in the same school and the teachers in these two classrooms combine their classes for social studies and science and team teach.

With the exception of physical education and music, the students remain in this classroom for all of their instruction. There are six students in this room -- three fifth-graders and three sixth-graders. All are LEP and all have been placed as LD.

As in Classroom I, the teacher in this room is a native Spanish speaker and the half-time bilingual aide is the same person who spends part of her time in Classroom I. Here too, most of the instruction is in Spanish, with some small group instruction in English. The special education teacher in this room is also responsible for teaching ESL to her students.

Classroom III. Classroom III is a resource room where a total of 13 LD students spend part of each day. Eight fifth-grade students spend their mornings in the room and a group of five third and fourth graders spend various portions of the afternoon. The activities to be described from this classroom will focus on the fifth graders, all of whom are from homes where Spanish is the primary language. Although their achievement was sufficiently low to precipitate special education placement, these students were not considered by the district to be LEP.

The teacher in this room learned Spanish as a second language. All instruction in the classroom is conducted in English and when students express themselves on occasion in Spanish they are asked to repeat themselves in English. There is no aide.

Classroom IV. This is also a resource room and a total of twelve LD students, ranging from second to sixth grade, attend for portions of their day. In contrast to the previous classrooms, most of the students in this resource room tended to come in for shorter periods of time, ranging from one to two hours, although two were observed to spend most of the day. Three of the students are officially LEP and three others who are not considered to be LEP come from homes where the primary language is Spanish. The remaining six students are non-Hispanic.

The teacher in this classroom does not speak Spanish but there is a part time bilingual aide. The aide is responsible for working in Spanish with those children who are truly LEP while the teacher conducts all work with the remaining students in English. There is much less whole-group instruction in this classroom than the other three rooms and students either work alone, on a one to one basis with the aide or teacher, or in groups of two or three with the teacher.

Coding videotapes for task engagement

Selection of episodes for analysis. Data for this paper are based on fourteen classroom episodes or activities selected from the entire set of classroom videotapes after excluding the first-day tapes. Since the goal was to examine characteristics of a range of activities or settings

associated with high or low proportions of engagement, all activities on the videotapes excepting math and non-language related activities were rated for overall task engagement. Those activities receiving the highest and lowest ratings were selected for more intensive coding. The focus on language-related activities was directed by previous findings in the four-year project that the goals and objectives on the IEPs of LEP students are predominantly langauge-related.

The final set of high- and low-engagement activities to be described represents a variety of activities in a variety of instructional settings. Included are episodes of whole-group instruction (which would be equivalent to small group instruction in a non-special education classroom), small group instruction consisting of one to three individuals, individual seatwork, and collaborative student pairs.

Coding of task engagement. Once selected, each tape episode was coded for the task engagement levels of each of the students participating in the task. With one exception, the separate activities or instructional sequences were coded from the time they actually began until they terminated, usually indicated by teacher announcement or teacher signals of beginning or end. The one exception was in a resource room where the majority of the student work was done individually. In this room, alternate fifteen-minute time samples from a two-hour videotape were used as a basis for the coding procedures described below. Transition times between separate class activities were not included in the time samples reported here. This means that engagement times represent engagement only during the actual allocated time of the specific activity described.

A time-sampling procedure was used to code the task engagement levels during the activities. Each student was coded for task engagement level during every alternate 30-second interval, beginning with the first minute of the activity and terminating with the end of the activity. This was facilitated by the fact that a time/date generator had been used to establish a permanent identification of each tape frame through the imprinting of running time (in hours, minutes and seconds) on each frame. Each child was observed over the 30-second period and coded according to the predominate state of engagement during that time. On the few occasions where two competing responses occurred evenly during the 30-seconds, the observations were coded in two 15-second periods, and each counted as one-half of an observation. Each interval was re-played as many times as necessary to capture the engagement levels of all students videotaped in the interval. Use of the 30-seond observation instead of the usual instantaneous coding for task engagement made possible the addition of a code to distinguish unusual intensity in engagement levels. The engagement level of each student was recorded on a coding form along with an identification of the particular 30-second interval, a brief description of the nature and group structure of the activity and the sex of the child being rated.

Both authors of this paper coded each student in every 30-second interval reported, working simultaneously. This permitted greater reflection and discussion on the processes of the activity under observation and speculation on the conditions surrounding high versus low engagemt, or

fluctuations in engagement. Coding reliabilities were calculated on the basis of percent of agreement across codings and ranged from .79 to .98. These were based on the codes recorded prior to any discussion of the observation. After coding each observation, the codes were discussed, the interval re-played if necessary, and an agreed-upon code retained. Almost all of the initial coding differences were of the distinction between 'engaged' and 'engaged intensively' although the reliability range was certainly acceptable.

Although a wide-angle lens was used during the videotaping in the classrooms, at times not all students were captured on the tapes at the same time. There was some panning of the classroom which at times obliterated the view of some children. Given this, the number of children on camera at any given time did not always include everyone who was participating in the activity. However, as the camera panned the classroom during activities, all students would appear at one time or another. The result is that the same number of students do not necessarily appear in each thirty-second interval nor do all students have the same number of ratings. However, the data are aggregated across students within an activity and are reported in terms of total number of 30-second student observations during any given activity. Although this situation is far from ideal and is due to the post hoc nature of the task engagement coding, this procedure does yield sufficient information to make generalized conclusions regarding overall task engagement levels for the class during any given activity.

Coding categories. The term task engagement as used in this study applies to the attention paid by the child to an academic task that is in accord with the immediate objectives delineated by the teacher. Success rates are not included in the definition as they are in studies of academic learning time (ALT) in order to capture information about activities that are associated with a full range of student engagement, including off-task behavior. Task engagement level was coded on the basis of four levels of engagement and one category of non-engagement that was due to classroom procedures, teacher interruptions, waiting for teacher assistance, or other reasons for which the child was not responsible. The four engagement levels were: engaged intensively, engaged, minimally engaged, and off task. Definitions used during the coding are as follows:

No academic task. No academic content is being taught to the student; teacher may be explaining procedures, child may be waiting for teacher feedback or instructions, getting materials, or other.

Off task. There is a task to attend to but student is attending to something else or visibly engaged in off-task behavior.

Engaged. Child appears to be attending to teacher or academic task as evidenced by direction of gaze toward teacher or materials, manipulation of materials or writing, engagement in task related discourse or interaction with others.

Intensive engagement. Child demonstrates an unusual intensity of engagement as evidenced by a tenseness of posture and inclination

toward the task or focus of activity as opposed to a reclining or semi-reclining posture, failure to look towards or be distracted by events that might normally cause momentary distraction, or straining forward during hand-raising and waving the arm about versus raising the hand with no straining or even supporting it with the other hand or on the desk, and rapid pace of work when working individually. Speed of speech, voice tone and volume were also considered in this rating, with more rapid, high-pitched and louder speech associated with higher levels of intensity.

Combining task engagement data with activity descriptions

Once the task engagement levels and proportions of time engaged had been determined, the videotapes were studied again in order to distinguish the characteristics of those activities that produced high versus low task engagement. The results indicated support for some of the literature on task engagement but also added a new dimension to associations with task engagement that was made possible by the distinction between ordinary engagement and intensive engagement.

Results and Discussion

Although this study is exploratory and the results are primarily speculative, the examination of task engagement across a variety of academic activities and settings provided an anchor for exploring those activities that that might suggest successful instructional strategies or activities for LEP students in special education. The anchoring of activity descriptions with records of engagement levels and rates raised a number of questions that will require formal study in the future. Table 1 lists the nature of the activities observed, the classroom in which they occurred (as described earlier), the length of each activity, the size and sex composition of the group engaged in the activity, the total number of 30-second observations of students, and the number and percent of observations that fell into each coding category.

Each of the major points raised by the association of various engagement rates with the activities in Table 1 are listed below along with descriptions of the relevant activities.

1. For the fourth- to sixth-grade LEP students in this study, the academic activities that were associated with the most intensive and prolonged levels of task engagement were activities that are observed infrequently in either regular or special education settings. They are activities that draw heavily upon and encourage expression of the experience, language background and interests of the children, that foster feelings of success and pride in accomplishment and give the children a sense of control over their own learning, and that include peer collaboration or peer approval. Furthermore, they are holistic in nature in that they do not involve learning or drilling of isolated, decontextualized segments of information.

Activity #1, a story writing activity in the partially self-contained room I, had the highest proportions of intensive task engagement (10 to 94

percent for the various components of the activity and 95 to 100 percent when the 'engaged' code is added to this). The breakdown of activities within the story writing session illustrate the various components, which occurred consecutively within the total 90-minute activity. Coding began and ended at the beginning and end of each component and did not include transition times between components. The total activity time on this particular day was longer than usual due to the fact that the teacher wanted the children to make up time lost during some recent holiday activities.

This particular writing activity was part of an experimental program designed to stimulate expressive writing and to teach language mechanics in a holistic, contextualized way. Modelled after Graves (1983), the activity began with a short relaxation exercise (not coded) that was followed by a story starter read by the teacher. The teacher read the story starter in English while the students remained in a relaxed position in their seats. Following the English version, the teacher paraphrased the story starter in Spanish, but in a more dramatic fashion than when she read the English version. (Recall that English is a second language for this teacher.) Making a distinction for the intensity of engagement was not possible while the students were listening in a relaxed state but they were coded as engaged if they demonstrated no off-task behavior and appeared to be listening. All of the students appeared to be attending to the story starter, which included suggestions that they were to have an adventure during the 'summer of their dreams.' The student assignment was to write about that summer and the adventures they would have.

The children were given twelve minutes to begin their stories and the intensity of engagement was remarkable. Ninety-four percent of the observations during this section of the activity were coded 'intensively engaged.' The students were bending over their papers, holding their pencils tightly, writing with vigor, and when someone from another classroom entered to speak to the teacher, most of the students did not even look up from their work. The two observations of off-task behavior were both of the same child who attempted to secure the teacher's attention to ask for assistance. When he failed to obtain assistance he ceased writing and began to engage in off-task behavior.

During most of the writing time the teacher stood beside one child who needed special help and gave both encouragement and assistance. For part of the time she also left the room, but this did not appear to affect the engagement levels of the children. In fact, they did not seem to notice that she was gone.

In the next section of the activity, students were given time to copy a fresh draft of their revised stories from a previous writing activity. In these writing classes, the focus was on the content of the children's writing and not the surface forms. Invented spellings and incorrect grammar were ignored unless the child recognized a need for revision. After the first draft of a piece of writing, the teacher had individual conferences with each student in which the student read his or her own story and underlined all words or parts that appeared to the student to need correction. The teacher helped the student to correct these parts and the

student then revised and recopied the draft. During the observation for this study, the students copied their revised versions with intense levels of engagemet. Again, the three observations of minimal or off-task behavior were of the same student. The student appeared to be in need of help but the teacher was busy helping one student most of the time and paid him no heed.

The fourth component of the writing period was a peer feedback session. Children volunteered to stand in front of the class and read their stories to the group. When they completed reading, the other students were invited to ask questions or to tell what part of the story they liked the best. Students were coded as they read their stories in order to capture the degree of intensity with which they read. One student received a code of high intensity during most of his reading. Although this student had difficulty reading, he stood up and struggled through the story with such intensity that he did not notice or pause for any of several distractions, including a loud passing vehicle that obliterated his voice and all classroom sounds.

Another remarkable observation during this sharing time was the quality of attention the other students paid to the reader, even when the reader read haltingly. Every student in the group appeared to be listening and appeared to be interested. Furthermore, when they were afi the opportunity to ask questions about the story or to state what par liked, they all had something to contribute. This discussion and sharing accepted in either Spanish or English, as was the story itself. Four chi.dren had written their stories in Spanish and one in English.

It was quite obvious throughout this activity that the students enjoyed their creations and were highly involved in writing. The teacher explained in a subsequent interview that one of the students had never written anything on his own other than his name until the week before this observation. (This was the fifth-grade LD student who had read his paper so intensely and whom the teacher had stood beside during the actual writing.) During this last month of school, through working with this writing program which had been in effect for about a month, the student finally wrote two sentences. He was so pleased with this product, which was not criticized for mispellings or grammatical errors, that the following week he expanded the two sentences to a complete page.

The final section of this activity was a 22-minute period in which the students were allowed to finish copying their stories or to continue writing their new stories. Again, the students were highly engaged, although the intensity of engagement dropped as the period wore on. The writing activities had lasted almost an hour and a half and the children appeared to be getting fatigued. The off-task episodes were due to the same student as before. During the time that he was copying his revised version he became frustrated when he could not secure the teacher's assistance and apparently decided not to participate in the activity. He was the only student who had not volunteered to share his story with the class. In the final copying period, however, he did manage to get the teacher to answer his question and he soon settled down and completed his story. The observations that were coded 'no task' during the final copying episode indicated that several of the students had completed their stories in the final minutes of the period

and were in transition. Two students (one of them the frustrated child just described) continued to write intensively for several minutes into the transition.

Although this type of writing activity is seldom observed in special education classrooms, the intensity of engagement demonstrated by these LEP students suggests that this type of activity could very well stimulate academic achievement to a greater degree than direct instruction in language arts or sentence writing on activity sheets or in workbooks. Others have described the success of writing programs that have similar characteristics. Graves (in Walshe, 192) has described increased achievement in writing, spelling and language arts as a result of his writing programs. He also touches on the notion of task engagement when he writes that children who are given control of the writing process in programs of this nature "will break the child labor laws." Hayes and Bahruth (1985) have described the use of daily dialogue journals with fifth-grade Hispanic migrant children who began fifth grade with first-grade reading levels. They report jumps of three to four grade levels in reading for these students within one academic year. The sense of control that children gain over their writing may be partly due to being able to choose what they wish to write. In this case there was some limitation to the amount of choice in that the children had been given a story starter and the structure and pacing of the activity was partly determined by the teacher. However, within that structure, the child's contribution was his or her own. Grannis (1978) has reported higher rates of task engagement when children have some choice among the activities in which they are required to engage.

Another activity in which students demonstrated prolonged and intense levels of engagement was activity #2 in classroom III. The entire class of 8 students went to a small room that contained one personal computer. The teacher assigned two boys to work at the computer while the rest of the class sat around a table and worked on worksheets provided by the teacher. During this time, the focus of the camera was on the two boys at the computer. The boys each had written a paragraph of their own about their favorite TV shows and were helping each other to enter the paragraph onto the computer using a word processing program. Again, the intensity of involvement was remarkable, and the boys received codes of 'intensive engagement' on 67 percent of the observations and 'engagement' on all remaining observations. One boy sat at the computer and typed the paragraph that was read to him by the other. During this typing, both boys attended to the screen and pointed out spelling and punctuation errors to each other, collaborating on how to correct the errors. Occasionally they would disagree over spelling or punctuation and would call the teacher to resolve the issue.

After the paragraph had been entered, both boys read it and located a few final errors that needed correction. Once this was done, the teacher helped the boys to print the paragraph out on the printer. The boys then switched places and the boy who had typed now read a paragraph to the other, who entered this onto the computer. After 35 minutes of total engagement, most of which was very intense, the boys finished. A third boy was assigned to the computer by the tacher and one from the initial pair was assigned to help him. Although the end of the class period cut this activity short, the

two boys spent twelve minutes engaged just as intensively as did the initial pair. Again, the degree of cooperation and collaboration, and the discussion regarding errors and how to corect them, were quite remarkable. The latter pair was even more remarkable because the boy most recently assigned to the computer was almost never observed to be on task during the remaining observations in this classroom.

Although high rates of task engagement have been found for LD students doing individual computer work in elementary schools (MacArthur, Haynes & Malouf, 1986), collaborative word processing of students' own material has seldom if ever been observed in studies of task engagement. The production of one's own written material holds all of the characteristics of activity #1 and it also has the added attraction of computer work. The values of peer collaboration in a setting which has been provided with some structure and a sense of accountability to one's peers also seem to be factors contributing to the engagement levels and times. A third activity also involved collaboration on the computer and also produced high proportions of engagement.

In this third activity (number 3, from classroom I), the class of five students spent the period in a computer lab where there were sufficient computers to allow each child to work individually. The children apparently were familiar with a number of available computer programs and were free to select the program of their choice. Three students chose individual programs while two girls chose to work together on a game of Hangman. In the game of Hangman, players must guess the letters that make up a word and insert these in blanks until they can identify the word. In the computer version, players must first enter their own word list. The computer then makes random selections of the words from the list and flashes the blanks for the letters on the screen. Players take turns guessing letters until one of them identifies the word and wins points. In this instance, the teacher entered the initial wordlist as the girls dictated the words they wanted, all of which were in Spanish.

The other three students selected different kinds of programs. One worked on a math program in which she was doing fractions and getting immediate feedback regarding her answers, one played a baseball game, and one selected a type of graphics program which he could not manage to figure out. On three occasions he asked the two girls who were playing Hangman for assistance but they were too involved in their game to help. When he did not get sufficient help, he tried to join the girls' game and then was sent to 'time out' by the teacher, who had not provided assistance with his initial selection. These episodes of frustration and seeking assistance represent those codes of 'off task', 'no task', and 'minimally engaged' during this activity. The remaining children remained engaged, with the girls who were working together probably demonstrating more intensity than the others. Their engagement represented a form of collaboration or social stimulation that the children working individually did not experience. The others may have been engaged as intensively, but the interactions of the girls were easier to distinguish as they pointed out letters to each other and discussed possible reponses while oriented to the screen,

Summarizing the discussion of the first point derived from these observations, it is important to note that the kinds of activities described above are seldom reported in observational studies or studies of task engagement because they are seldom found in classrooms. Since activities of this type appear to hold promise for improving written and oral language and reading, they may need to be created deliberately as experimental interventions in order to carry out the formal studies of the effects of such activities on achievement and on engagement rates.

2. Context, in both sense of providing instructional activities that are embedded in a meaningful context, and in the sense of providing contextual clues to aid comprehension, is an important component of instruction for low achieving LEP students. Those activities that included context in both of these senses produced higher task engagement and greater success than those activities that segmented knowledge into separate, decontextualized skills.

Activity context. The activities associated with the most intense and prolonged task engagement that are described above are all embedded in a meaningful and purposeful context. The writing activities have the goal of producing an original piece of work that can be shared with classmates and the children's own experiences and ideas provide the context of the actual written piece. In contrast, drill activities that present decontextualized information were among those activities producing the lowest rates of task engagement. Two spelling groups in Classroom III (activities 8 and 9) illustrate this point.

The two spelling groups were carried out according to a rigid drill plan which followed a set sequence. First, the teacher would flash a card on which was written a word for the students to see and repeat. Then, following the teacher's lead, the students were to snap out the letters of the words in rhythm, snapping and calling out the letters in unison. After each snapping out of the letters, the teacher would repeat, "Again," and snap the word out the second, third or fourth time. Upon completing at least four repetitions, students were told to write the word. Finally, when the list of words had been drilled orally, the children returned to their written words and copied each one five times.

The engagement ratings in both of these spelling groups clearly reflect the students' dislike for this procedure. In one group of three students, engagement was minimal for 94 percent of the observations and off task for the remaining six percent. In the group of five boys there was minimal task engagement for 40 percent of the ratings and off-task behavior for 48 percent of the ratings. The remaning observatons were of time spent waiting while the teacher tried to get the children back on task.

Throughout the activity, the teacher had to remind the students repeatedly to snap along with her. At times she would stop and reprimand the students who tried to get through the activity faster by jumping ahead and writing their words five times while they were supposed to be snapping the rhythm. The lack of meaningful context for the activity is illustrated by one student who verbally expressed his dislike for the activity and asked why they had to do it. The response was that they needed to get good grades.

Also noticeable in this type of drill is the absence of context for the words to be spelled. Not only were words not presented in the context of a sentence which would give them more meaning (an essential characteristic of instruction for children who are learning or using English as a second language) but also the word repeated between snappings was "again" and not the word to be spelled. This is probably responsble for one child's query, after snapping the letters four times and being told to write the word, "What was the word?"

A direct comparison of this lack of a purposeful context and resulting lack of interest in spelling can be made to the writing activity on the computer that was described earlier, where pairs of boys were word processing their own written paragraphs. These same boys were part of the group who participated in and demonstrated such dislike for the spelling drill. Yet, while typing their own productions on the computer, they were most concerned about the correct spelling of the words they were using and many of their interactions were discussions of spelling.

Even more illuminating is one incident that happened when the first pair had completed a paragraph and sought the teacher's approval so it could be printed out. As the teacher read and checked the paragraph on the screen, she asked one of the boys, "Is that hou you spell 'people?' Which comes first, the 'e' or the'o'?" The child then corrected his misspelled word. Shortly thereafter, this boy worked with his second partner, who happened to be the same boy that expressed such dislike for the spelling drill and had asked why it was necessary. The first boy acted as reader and collaborater while the new partner typed his paragraph, which also contained the word 'people.' The typist also misspelled 'people' and boy 1, who had been corrected by the teacher previously, pointed this out. In dictating the correct spelling while the partner corrected the word, this boy spelled out the letters in 'people' three separate times.

The other example of spelling that can be compared to the decontextualized drill was the computer collaboration activity where the two girls were playing 'Hangman.' In this activity, the girls were using words of their own choosing that were extracted from the context of their own experience. Recall that engagement in this activity was also high.

Contextual clues to enhance comprehension. In writing about the difficulties of low-achieving LEP students in special education, Cummins (1984) and others have argued that the way to simplify a task for a child is to add sufficient context to make the task comprehensible as opposed to segmenting the task into decontextualized units. Observations in this study indicated that teachers frequently attempt to teach discrete aspects of concepts without contextual support. Two episodes where fluctuations in task-engagement levels were associated with the addition of contextual clues during teacher-led instruction illustrate the effects of adding context.

Activity 10 was a teacher-led class in which there was a high proportion of off-task behavior and minimal engagement (52 and 46 percent, respectively). In this instance, the children were to learn to identify

adjectives by first describing any of a series of elves pictured across the top of the blackboard. This part of the activity did not go well and one contributing factor might have been that the students did not really understand the concept of describe. In any event, the teacher switched to an activity where the students read a paragraph from a large chart that was hung over the blackboard. After oral reading of the paragraph by one boy, the children were asked to identify the adjectives in the paragraph. Although most of the engagement codes during this activity were 'minimally engaged' or 'off task,' a momentary burst of engagement during the activity was associated wth the additon of contextual clues that clarified the demands of the activity. After a number of unsuccessful attempts to engage the class, the teacher introduced a sentence starter and wrote on the board, "It is very ___." She told the children if they could supply a word that would fit in the sentence correctly, it would be an adjective. This addition of context seemed to clarify the concepts of describe and adjective and produced a burst of enthusiasm in the students. They began calling out appropriate words of their own choosing and, for a few brief moments, were truly engaged in the academic activity. Unfortunately, the teacher missed the chance to capitalize on this enthusiasm and immediately reverted to further lecture about adjectives and lost the spurt of student engagement.

This addition of context with a resulting spurt of enthusiasm and success on the part of the students was observed in one other small group activity in a different classroom. In that particular activity, the teacher was drilling students on the use of the past tense. She gave them several sentences where a verb was to be inserted in the past tense. The students correctly called out the verb form. When it looked like the students understood the task, the teacher dropped the use of the sentences and merely asked, "OK, what's the past tense of ____?" (inserting the verb). With this reduced context, the students were unable to answer. As soon as the teacher reverted to supplying the surrounding context for the verb, the children were again able to answer correctly. When the verbal exercise was over, the students were instructed to fill out a worksheet that called for the past tense of a list of verbs. One child, who had been the most adept at responding correctly to the sentences, returned to his seat and started to work. He stopped, raised his hand and asked, "Teacher, what does 'past tense' mean?".

These examples illustrate that the addition of contextual clues is a powerful way to enhance comprehension, especially for students whose primary language is not English. Enhanced comprehension produces student success, and these examples also support the body of research that has found student success to be strongly related to task engagement.

3. The observations in this study lend support to research findings that direct instruction tends to produce task engagement, but the observations also suggest that this relationship is mediated by the nature of the instruction.

Direct instruction, or teacher-led instruction that includes teacher structuring, pacing and directing, provision of academic monitoring, feedback, questioning and explaining, has consistently been associated with

higher proportions of task engagement in both regular classrooms and special education classrooms when compared to individual seatwork (e.g., Reith, 1983, Filby and Cahen, 1985). Results from the present study support that finding in that activities 4, 5, and 7 from Table 1, which include teacher-led social studies, science, and small group instruction for reading and languge arts, had high proportions of task engagement when the 'engaged' and 'intensively engaged' categories are considered together. Furthermore, (Graden, 1984 & Stodolsky, 1979) report higher proportions of task engagement in science and social studies than in language and math.

The teacher-led class on adjectives, described above, illustrates a link in direct instruction activites between provision of context that promotes student comprehension and student success with task engagement. When students cannot comprehend teacher explanations and are unable to participate successfully, they lose interest in the task. On the other hand, when direct instruction is able to promote student comprehension and student success, engagement proportions remain high. Several episodes of direct instruction in these observations were associated with high proportions of task engagement, although not of the same intensity as in the writing and collaborative computer activites described earlier in this paper. The direct instruction activities, (numbers 4, 5 and 7) were associated with proportions of engagement ranging from 86 to 100 percent.

Activty number 4 was a science class for which classrooms I and II were combined, making a total of 11 LEP students. Most of the class period was characterized by lecture/discussion on the topic of solar bodies. Both the lecture or explanation segments and the discussion were conducted in Spanish and the teachers explained that they were making a deliberate attempt to use the science and social studies classes for language development as well as content instruction. The science teacher had a few pictures of comets and other solar bodies which she held up and used during the lecture portions.

Throughout the class period, students were free to contribute to the discussion or ask questions, and they used this prerogative freely. At the beginning and end of the class, the teacher reviewed the names and characteristics of the solar bodies they were studying (i.e., meteorites, meteors, comets, etc.) by conducting a drill where students answered her questions. Although some call-outs were accepted, for the most part students raised their hands to participate and the teacher called on students randomly. It was during these drill sessions, when students waved their hands in the air and strained forward to be called upon that the intensive codes were recorded. Usually the students were able to respond with correct answers, although the focus on the subject matter was intense and paced rapidly so that it did not seem to bother students if they responded occasionally in error. In these instances, the teacher simply indicated inorrect answers with 'no' and called on another. In short, the characteristics of this class were typical characteristics of direct instruction — teacher directed, briskly paced, and content-focused with substantial engagement of students.

The social studies class also was characterized by high proportions of engaged time, although engagement did not appear to be quite as intense when

compared to those activities discussed above. Students were learning about the various geographical regions in their state and the kinds of products that predominated in each region. A large map of the state, with the regions in different colors, was hung over the board at the front of the room. Discussion and activities were directed towards identifying regions and products.

The thirty-three minutes of actual allocated time was divided into three activities, with transition times in between. The first part of the class consisted of recitation, with the teacher calling on students who raised their hands. The questions were from a written homework assignment which each student had completed and had in hand and corrected as answers were discussed in class. As the teacher asked the questions, student callouts were accepted while others raised their hands and were called on. Students appeared to be engaged in the activity for 89 percent of the observations. Six percent of the observations wee coded 'minimally engaged' and another six percent were taken up with procedures.

The second part of the activity, in which children were engaged during 100 percent of the observations, was a team competition with the class divided into two groups. They responded to similar questions as in the first part of the class and earned points for their team each time they gave a correct answer. This activity was also teacher-led, and the teacher asked the questions, decided whom to call on, and kept score on the board. Although there was an air of intensity during this activity and students demonstrated excitement when they won points, it was not of sufficient duration to merit a rating of 'intensively engaged.'

A number of factors may have contributed to the high proportions of engagement in these direct instruction activities. Children had no difficulty understanding the concepts nor the tasks, especially since they were presented in their dominant language. The classes were briskly paced and the students gave a high proportion of successful answers, factors that have been frequently associated with task engagement in other studies. The activities also had a high degree of what Grannis (1978) has called teacher press, or the pressure exerted by a physical or psychological proximity of the teacher. Although the teachers were at the front of the room, the classes were small and there was a sense of proximity to the teacher. In sum, the characteristics of direct instruction that have usually been associated with task engagement in the literature show the same associations in classes with LEP students when instruction is provided in their native language.

4. Instruction at high conceptual levels is possible with LEP students in special education classes when the instruction is in the native language of the child.

The direct-instruction activities that were provided in the native language and described above seemed to be at the same conceptual level as they would be in non-special education classes at the grade level of the children. As the interest and engagement levels of the students were observed, it was difficult to imagine that engagement in discussion at this

conceptual level could have occurred in English for these students. The conceptual level of the discussion would have been minimal if the students had had to struggle with comprehending the language of the discussion. One good example illustrates this point. During the discussion of comets, and Haley's comet in particular, one boy called out the following question: "But teacher, if the comet only comes around once every 75 years, how do they know it's the same comet when they see it?" Provocation of this level of thought through a discussion in English would not have been possible.

This illustration accentuates the need to develop priorities in the kinds of knowledge we wish to impart to limited or non-English proficient school children. Both in regular and special education classes, the decision must be made whether to sacrifice conceptual development in the push for quicker learning of English by presenting all instruction in English.

5. In special education classrooms, engagement during individual instruction is heavily dependent upon the number of interruptions for the teacher as she simultaneously tries to cope with managing seatwork of the remaining students.

Activities 11 and 12 illustrate the nature of task engagement that was frequently observed in individual instruction. In these activities, individual work with an aide produced higher rates of engagement than individual work with the teacher. This was due to constant interruptions for the teacher as she worked with one student. While the aide was freer to spend time with one student, the teacher frequently stopped to monitor the class, to correct papers of other students who approached her, or to answer other students' questions and requests. Activity 12 represents the ratings of one boy's individual session with the teacher. During the ten minutes that he was seated at the teacher's table to read with her, he spent 75 percent of his time waiting while she corrected papers and answered questions for other students. While he waited, he spent an additional 6 percnt of his time in off-task interactions with another student who was seated near the teacher's table. He got to read with the teacher for 19 percent of this period.

This type of situation was observed in a number of classrooms in addition to those on videotape. The great diversity in student composition in most classrooms places an additional burden on the special education teacher who is supposed to provide individualized instruction for a much broader range of students than is found in regular classrooms.

6. Task engagement during seatwork activities was either low or high, depending upon the characteristics and purpose of the task and teacher availability. Since seatwork is the most frequent activity in the majority of special education classrooms, characteristics of situations that produce high levels of engagement during seatwork need to be an integral part of teacher training in special education along with recognition of alternative options.

Low task engagement during individual seatwork has often been reported in the literature. In the special education setting, children frequently

spend most of their time in individual seatwork since many teachers use seatwork as a means to accomplish individualized instruction.

In the present study, some seatwork situations had high proportions of off-task behavior while others produced greater amounts of task engagement. For example, activities 13 and 14 were characterized by a great deal of off-task behavior. During the observations of seatwork in both of these classrooms, the teachers were engaged in small group instruction and were not available to the remaining students nor were they able to engage in obvious surveillance. This supports findings that greater amounts of teacher surveillance have been found to increase task engagement during seatwork (Anderson, 1985). In one of the activities, the seatwork had a very apparent lack of purpose. In this activity, the students slated for seatwork were to do silent reading while the teacher instructed a small group of students. The apparent purpose for the reading was to keep the students busy while the teacher worked with the small group. The students were not told whether there would be any follow-up activity such as a sharing session with other students or with the teacher, and the lack of purpose appeared to influence the students' behavior.

The low engagement in these seatwork situations may be compared to the intense engagement of the students who were writing their stories in activity #1. In that situation, along with the characteristics surrounding the production of one's own creative product, there was also a sense of involvement with the others in that the students knew they would be sharing their stories with the class.

Cooperative study pairs will be considered as a special type of seatwork for the purpose of this discussion. These situations also demonstrated variability in the proportion of task engagement. In the last component of activity 5, students paired up with someone of their own choosing and studied the same material they had been discussing in class in preparation for an upcoming test. Thus, the work was actually an extension of the group instruction in which there had been high engagement and recitiation. The 94 percent proportion of engagement in this situation supports the work of (Cahen & Filby, 1985), who reports that seatwork which follows or corresponds to a group session in which there was a high amount of substantive interaction tends to have high levels of engagement. During this cooperative study, the teacher worked with one student at a table in the corner of the room and did not need to be physically near the groups of students to keep them on task.

In contrast to this last activity, where the cooperative work assignment was an extension of the previous discussion and appeared to have a definite goal, activity 6 in the same classroom produced less task engagement. In this activity, two groups of two students each were formed in order to drill on spelling words in English while the teacher worked with a small group in the corner of the room. The activity took the form of a board game, where students asked each other to spell words after flashing a card with the word and to use the word in a sentence. For each correct response, a student could throw the dice and move a wooden peg along the path drawn on the board for the distance specified on the dice.

This activity produced much less task engagement than the previous paired study session. The 'off task' observations included discussions over the rules or procedures of the game, playing with the dice and markers, distraction when another student came by momentarily, and interruptions by the teacher to call out procedures from the corner of the room where she was working with a small group. Also lacking in this session was the cohesive feeling found in the previous cooperative study situation. That feeling had seemed to be related to the fact that the study session was an extension of the previous group instruction. Also, there seemed to be less urgency of purpose in the spelling activity and the language of the activity might also have made a difference. The spelling drill covered a list of words in English and all of the students involved in the drill were LEP. One of the boys who appeared to be minimally engaged was seen to lessen hs involvement when he did not understand the meaning of the word 'just' which he was to spell and use in a sentence.

In sum, seatwork that has a sense of purpose, that the student feels able to complete, and which is accompanied by teacher availability, was associated with higher task engagement in these observations. The complexity of managing a special education classroom, which entails a great deal of small group and individual instruction, must be addressed both in research programs to investigate alternative activities that allow for individualization (such as the writing activities discussed earlier) and in teacher training programs that prepare teachers for the complex management necessary in special education.

References

Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. England: Clevedon, Avon, Multilingual Matters Ltd.

Filby, N. N. and Cahen, L. S. (1985). Teacher accessibility and student attention. In Charles W. Fisher & David C. Berliner (Eds.), Perspectives on instructional time. New York: Longman.

Graden, J. (1984). When are students most academically engaged? Students' academic responding time in different instructional ecologies. Eric Document: 237214.

Grannis, J. C. (1978). Task engagement and the consistency of pedagogical controls: An ecological study of differently structured classroom settings. Curriculum Inquiry (8).

Graves, D. H. (1983). Writing: Teachers and Children at Work. Exeter, New Hamphire: Heinemann.

Hayes, C. W. & Bahruth, R. (1985). Querer es poder. In Jane Hansen, Thomas Newkirk & Donald Graves (Eds.), Breaking ground: Teachers relate reading and writing in the elementary school. (Find out publishing info from Bob Bahruth).

MacArthur, C. A., Haynes, J. A., Malouf, D. B. (1986). Learning disabled students' engaged time and classroom interaction: The impact of computer assisted instruction. Educational Computing Research, 2(2).

Rieth, H. J. (1985). An analysis of the impact of instructional time within different service delivery systems on the academic achievement of mildly handicapped children. Final Report, Center for Innovation in Teaching the Handicapped. ED 254030.

Stodolsky, S. (1979). Ecological features of fifth-grade math and social studies classes and their relation to student involvement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. ED 184 310.

Walshe, R. D. (1982). Donald Graves in Australia: "Children want to write...". Exeter, New Hampshire: Heinemann.

Table 1

Observations of Students at Different Task Engagement Levels by Type of Activity and Special Education Classroom

Activity	Classroom[a,b]	Group size	Length of activity (in minutes)	Total number of 30-second observations[e]	Number and percent of observations									
					Intensively engaged		Engaged		Minimally engaged		Off task		No task	
					No.	%	No.	%	No.	%	No.	%	No.	%
1. Story writing														
Listening to story starter	I[a]	3F 2M	6	35	--	--	35	100	--	--	--	--	--	--
Writing own stories	I[a]	3F 2M	12	62	58	94	2	3	--	--	2	3	--	--
Copying revised versions of previous story	I[a]	3F 2M	14	55	41	75	11	20	1	2	2	4	--	--
Sharing stories with class, getting feedback	I[a]	3F 2M	13	10	6	60	4	40	--	--	--	--	--	--
Listening to others' stories, giving feedback	I[a]	3F 2M	13	36	5	14	31	86	--	--	--	--	--	--
Independent seatwork, mostly copying stories	I[a]	3F 2M	22	87	9	10	59	68	--	--	5	6	14	16
2. Computer word processing own writing, paired	III[b]	-- 2M	47	78	52	67	26	33	--	--	--	--	--	--
3. Computer games, individual and paired	I[a]	3F 2M	19	46	2	4	38	83	1	2	3	7	2	4
4. Science - lecture/discussion on solar bodies	I[a]	4F 5M	43	375	38	10	284	76	36	10	17	5	--	--
5. Social studies														
Group recitation & self-correction of written work	II[a]	5F 6M	17	198	--	--	176	89	11	6	--	--	11	6
Team competition/ teacher drill	II[a]	5F 6M	9	110	--	--	110	100	--	--	--	--	--	--
Cooperative study, paired	II[a]	5F 6M	7	35	--	--	33	94	2	6	--	--	--	--
6. Spelling board games, paired	II[a]	1F 3M	18	62	--	--	21	34	--	--	19	31	22	35
7. Teacher-led small groups-reading and language arts	IV[b]	2F 1M	15	37	1	3	33	89	2	5	1	3	--	--
8. Small group spelling	III[b]	2F 1M	9	18	--	--	--	--	17	94	1	6	--	--
9. Small group spelling	III[b]	-- 5M	8	40	--	--	--	--	16	40	19	48	5	13
10. Teacher-led class on adjectives	III[b]	2F 6M	40	185	--	--	4	2	85	46	96	52	--	--
11. Individual work with aide	IV[b]	1F --	74	18	--	--	17	94	--	--	--	--	1	6
12. Individual work with teacher	IV[b]	-- 1M	10	16	--	--	3	19	--	--	1	6	12	75
13. Individual seatwork	IV[b]	4F 7M[c]	60[d]	81	--	--	38	47	3	4	37	46	3	4
14. Individual seatwork	III[b]	1F 3M	9	14	--	--	--	--	6	43	8	57	--	--

Note. Percentages have been rounded and may not sum to 100.
[a]Partially self-contained bilingual special education.
[b]Resource room, class composition varies.
[c]Represents total of students observed in this classroom. No. present at any given time did not exceed 8.
[d]Consists of four 15-minute samples over two-hour period.
[e]Total represents sum of separate observations of students across all 30-second observations within an activity. No. of observations per student varies

END

U.S. Dept. of Education

Office of Education
Research and
Improvement (OERI)

ERIC

Date Filmed

March 29, 1991